

Title (en)

Variable square air intake duct

Title (de)

Querschnittsgeregelter Rechteck-Lufteinlauf

Title (fr)

Entrée d'air rectangulaire à section réglable

Publication

EP 0593987 B1 19960417 (DE)

Application

EP 93116240 A 19931007

Priority

DE 4235631 A 19921022

Abstract (en)

[origin: EP0593987A1] Variable-geometry rectangular air intake for high Mach numbers, having an inlet flow part which extends downstream of a shock wave ramp leading edge, a diffuser part adjoining said part, and a pivotable adjusting ramp which permits variation of the air throughflow. The adjusting ramp 12 has an axis 12a of rotation in the rear diffuser part 15, forms the lower termination of the diffuser part 15 and exhibits a continuous range of adjustments, from complete opening at high Mach numbers to complete closure, e.g. during the boost phase. During opening of the adjusting ramp 12, the attendant widening of the inlet flow cross-section permits an increasing internal supersonic compression. An auxiliary flap 17 which extends below the adjusting ramp 12 up to a connecting web 16 arranged between the side walls 11 guarantees that the lower flow termination is of low resistance. <IMAGE>

IPC 1-7

B64D 33/02; **F02C 7/042**; **F02K 7/14**

IPC 8 full level

B64D 33/02 (2006.01); **F02C 7/042** (2006.01); **F02K 7/14** (2006.01)

CPC (source: EP)

B64D 33/02 (2013.01); **F02C 7/042** (2013.01); **F02K 7/14** (2013.01); **B64D 2033/026** (2013.01); **F05D 2250/121** (2013.01)

Cited by

CN104908975A; CN111577465A; CN111731467A; CN109689500A

Designated contracting state (EPC)

DE FR GB IT NL SE

DOCDB simple family (publication)

EP 0593987 A1 19940427; **EP 0593987 B1 19960417**; DE 4235631 C1 19940519; DE 59302252 D1 19960523

DOCDB simple family (application)

EP 93116240 A 19931007; DE 4235631 A 19921022; DE 59302252 T 19931007